

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address COMMISSIONER FOR PATENTS P O Box 1450 Alexandra, Virginia 22313-1450 www.weylo.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/554,634	03/16/2007	Hubert Kaeslin	4436-0113PUS1	9211	
2292 7590 08/20/2009 BIRCH STEWART KOLASCH & BIRCH PO BOX 747			EXAM	EXAMINER	
			LAXTON, GARY L		
FALLS CHUF	RCH, VA 22040-0747		ART UNIT	PAPER NUMBER	
			2838		
			NOTIFICATION DATE	DELIVERY MODE	
			08/20/2009	ELECTRONIC	

# Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail  $\,$  address(es):

mailroom@bskb.com

# Application No. Applicant(s) 10/554.634 KAESLIN ET AL. Office Action Summary Examiner Art Unit Gary L. Laxton 2838 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) OR THIRTY (30) DAYS. WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status 1) Responsive to communication(s) filed on 26 February 2009. 2a) This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 1-6 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) \_\_\_\_\_ is/are allowed. Claim(s) \_\_\_\_\_ is/are rejected. 7) Claim(s) 1-6 is/are objected to. 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on 27 October 2005 is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some \* c) None of: Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). \* See the attached detailed Office action for a list of the certified copies not received.

1) Notice of References Cited (PTO-892)

Paper No(s)/Mail Date 10/27/05

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

Attachment(s)

Interview Summary (PTO-413)
Paper No(s)/Mail Date.

6) Other:

Notice of Informal Patent Application

Application/Control Number: 10/554,634 Page 2

Art Unit: 2838

### DETAILED ACTION

### Inventorship

1. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

#### Information Disclosure Statement

2. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609.04(a) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

### Specification

 Applicant is reminded of the proper language and format for an abstract of the disclosure. Application/Control Number: 10/554,634

Art Unit: 2838

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

4. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

# Claim Objections

- 5. Claims 1-6 are objected to because of the following informalities:
  - Claim 1, line 2, recites "which each has to" [sic].

Claim 1, lines 5-7, recites the "ground voltage level" of the first sub-circuit is used as the supply voltage of the second sub-circuit. If the voltage at the supply terminal of the 2<sup>nd</sup> sub-circuit is at ground level (i.e. zero volts) and the ground terminal is at ground level, how does the 2<sup>nd</sup> sub-circuit operate? The examiner assumes the applicant means the voltage at the second supply reference terminal (normally a ground reference: GND) of sub-circuit 1 is the input supply voltage to the 2<sup>nd</sup> sub-circuit and not literally a supply voltage at ground voltage level (i.e. zero volts).

Application/Control Number: 10/554,634

Art Unit: 2838

Claim 1 recites the limitation "supply voltage" in line 8. There is insufficient antecedent basis for this limitation in the claim. The applicant is not properly distinguishing the plural supply voltages that have been claimed. There are at least two different supply voltages the applicant has claimed yet refers to them both as the supply voltage. Which supply voltage is which? The applicant should label each supply voltage separately and distinctly.

Claim1, the phrase "or some other suitable" renders the claim(s) indefinite because the claim(s) include(s) elements not actually disclosed (those encompassed by the phrase), thereby rendering the scope of the claim(s) unascertainable. See MPEP § 2173.05(d).

Claim 2 recites the limitation "the switches" in line 1. There is insufficient antecedent basis for this limitation in the claim. Claim 1 recited "a switching system", there is no recitation regarding actual switches.

Claim 3 recites the limitation "capacitors" (plural) in line 2. There is insufficient antecedent basis for this limitation in the claim. Claim 1 recited a single bucket capacitor. Claim 2 is the only claim that recited bucket capacitors. And since claim 3 alternatively depends from claim 1, there is no antecedent basis for this limitation in claim 1.

Claim 4 recites the limitation "wherein sub-circuits" in line 1. There is insufficient antecedent basis for this limitation in the claim. Are these the same as the first and second sub-circuits recited in claim 1 or are they additional sub-circuits?

Claim 5 recites the limitation "whereby sub-circuits" in line 1. There is insufficient antecedent basis for this limitation in the claim. Are these the same as the first and second sub-circuits recited in claim 1 or are they additional sub-circuits?

Claim 5 recites "on each their chip" [sic].

Application/Control Number: 10/554,634

Art Unit: 2838

Claim 6 recites the limitation "whereby sub-circuits" in line 1. There is insufficient antecedent basis for this limitation in the claim. Are these the same as the first and second sub-circuits recited in claim 1 or are they additional sub-circuits?

Claims 2-6 inherit the same from claim 1 due to dependency.

Appropriate correction is required.

# Allowable Subject Matter

- Claims 1-6 would be allowable if rewritten or amended to overcome the objection(s) set forth in this Office action.
- 7. The following is a statement of reasons for the indication of allowable subject matter: [An] IC-circuit construction partitioned into power consuming sub-circuits connected in series and a control-circuit provided to balance voltage drops across the power consuming sub-circuits whereby constant voltage-drops over the sub-circuits are maintained, where the control circuit comprises a first buffer capacitor coupled in parallel over the supply voltage level and ground voltage terminal of the first sub-circuit and a second buffer capacitor coupled in parallel over the supply voltage level and the ground voltage [terminal] of the second sub-circuit, whereby means for maintaining a uniform voltage drop over the first and the second buffer capacitor comprises at least one bucket capacitor which is alternately coupled in parallel over the first and the second buffer capacitor through a switching system controlled by a toggling signal.

Application/Control Number: 10/554,634 Page 6

Art Unit: 2838

### Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US 7,329,968 Shepard et al. disclose recycling domains for energy efficient low voltage operation of digital circuits; US 5,781,001 Takemoto disclose a voltage generating apparatus.

 This application is in condition for allowance except for the following formal matters:

Noted above

Prosecution on the merits is closed in accordance with the practice under *Ex* parte Quayle, 25 USPQ 74, 453 O.G. 213, (Comm'r Pat. 1935).

A shortened statutory period for reply to this action is set to expire **TWO**MONTHS from the mailing date of this letter.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gary L. Laxton whose telephone number is (571) 272-2079. The examiner can normally be reached on Monday thru Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jayprakash N. Gandhi can be reached on (571) 272-3740. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2838

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Gary L. Laxton/ Primary Examiner Art Unit 2838

8/14/2009